1. Name of Property

historic name: Craighill Channel Lower Range Rear Light Station

other names/site number: BA-1550

2. Location

street & number: N/A not for publication: N/A

city or town: near Edgemere vicinity X

state: Maryland code: MD county:Baltimore code: 005 zip code: N/A

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this nomination meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets the National Register Criteria. I recommend that this property be considered significant statewide. (___See continuation sheet for additional comments.)

ACTING
Captain, U. S. Coast Guard,
Chief, Office of Civil Engineering 2/22/02
Signature of certifying official Date

Department of Transportation, U.S. Coast Guard
State or Federal agency and bureau

In my opinion, the property X meets ____ does not meet the National Register criteria. (___ See continuation sheet for additional comments.)

Signature of commenting or other official 5-7-02
Date

State or Federal agency and bureau

6. Function or Use

Historic Functions (Enter categories from instructions)
Cat: transportation Sub: water-related

Current Functions (Enter categories from instructions)
Cat: transportation Sub: water-related

7. Description

Architectural Classification (Enter categories from instructions): No Style

Materials (Enter categories from instructions):

foundation:	stone
roof:	sheet metal
walls:	wood covered with sheet metal
other:	exoskeleton: cast iron
	lantern: cast iron

Narrative Description (Describe the historic and current condition of the property.)[1]

Description Summary

The Craighill Channel Lower Rear Range Light Station consists of a square pyramidal exoskeleton cast-iron tower with a square wooden enclosed stairwell to the lantern room. The 1 1/2-story keeper's quarters, now destroyed, was a square dwelling built on the lighthouse's nine granite foundation piers. The Craighill Channel Lower Range Rear Lighthouse is located in 2 to 3 feet of water, marking the south entrance to Craighill Channel, near the southerly end of Hart Island, northern Chesapeake Bay, western shore, near Edgemere, Baltimore County, Maryland. The lower range front light, which works in association with the rear light, is located 2.4 miles south. Owned and managed by the U.S. Coast Guard in District 5, access to the station is via boat.

Existing Structures

Tower, Foundation

The foundation consists of three rows of three piers, a total of nine piers, all made of Port Deposit granite. These piers have been covered with prefab Plexiglas protective covers. A

[1] The following description and associated photographs were reviewed in August and September 2002 by a US Coast Guard Aid to Navigation team responsible for the property. A document verifying that the description and associated photographs reflect the current condition of the property is on file with the Office of Civil Engineering, US Coast Guard Headquarters, Washington, D.C.

landing platform and ladder is located on the west side. A modern pipe railing surrounds the landing.

Tower, Exterior

The wooden tower is covered with corrugated metal sheets. The keeper's house, which was located around the tower at the bottom two levels, was removed shortly after automation in 1937. The metal sheet siding is continuous to the base of the tower indicating it was applied at the same time, or shortly after, the dwelling was torn down. A lantern room surmounts the top of the tower. From each of the four corner piers, an iron exoskeleton pyramidal column provides support to the inner wooden tower. The lower approximate 1/3 of the tower, where the keeper's quarters were located, was painted white, and the remaining upper portion of the tower was painted brown.

Tower, Interior

The entrance door to the tower is located on the east side. A counter clockwise series of stairs and landing ascends to the lantern. There are five sets of four steps, each with a corner landing, then a full landing on the east side followed by five more sets of four steps and corner landings. At this point, a vertical beaded wooden door with a metal slide bolt closure opens to a small wood exterior deck facing south. This door is now permanently sealed. Three more sets of four steps follow to where a single pane Plexiglas window, vented on the north side, is located. Four more sets of four steps and corner landings end with a full landing on the north side from which a boarded door once opened on to another small wooden exterior deck. Three more sets of four steps and corner landings follow to where a single pane Plexiglas window, vented on the south side, is located. Finally, four more sets of four steps and corner landings end at the service room, which has narrow single pane Plexiglas windows with vents on each side. From here two sets of four steps end at the watch room. All of the steps appear to be original except for the lower two sets where some plywood treads have been installed. The first step-riser on the second set of stairs is original and has a turned down half moon cut into the middle and a round hole to either side. These may have been for ventilation purposes when the dwelling was intact and the space under the stairwell was used as a storage area.

Service Room

The service room has three narrow windows on the south, east, and west side; all three windows are single pane Plexiglas with vents. The floors are painted gray. A double trap door is located in the floor with a large iron hook fastened to one of the timbers over the hatch for purposes of hauling supplies. The tower's heavy wooden framing is exposed and consists of horizontal, vertical, and cross framing. The exterior vertical siding is visible behind the framing. The framing and siding are all painted white. There are 12 steps up to the watch room.

Watch Room

Access to the lantern room is via 16 wooden steps within a spiral stairwell. The under side of the stairwell is covered with sheet metal. A banister once ran along the south side of the service room where the stairwell descends to the Service Room; the banister was replaced in 2000. The

watch room is covered with vertical beaded paneling on the walls and ceilings, both painted white. The baseboard is painted gray. There are double window openings on the south, east, and west side, now boarded over. On the north side is a storage area under the spiral staircase and the fitting for a heating stove in the wall. Sheet metal covers the walls and part of the floor where the stove was located. A door between the stairwell and stove opened to a full gallery below the lantern room gallery, but the door is now sealed shut. The gallery balustrade is made of wood posts with three rails and a wooden deck, all painted brown.

Lantern Room

The lantern room is square, covered with variable width vertical beaded paneling on the interior, and painted white. The baseboard is gray. The lantern room has a wooden floor. The roof is covered with sheet metal, and the smoke hood is intact. A storm pane is located in the south side for the range light, and a smaller window on the north side. Ventilators with regulators are located on the parapet walls on both the east and west sides, and two open vents are located on the south parapet wall. A wooden rail once ran across the lantern room to guard the stairwell, but only the newel post and top and bottom rail survive; all seven pickets are missing.

Access to the upper or lantern gallery deck is via a plywood half-door. Originally, there was a double half-door as indicated by hinges on both sides of the doorway frame. The deck is covered with flat seam sheet metal. The gallery balustrade is made of wooden posts, rails, and pickets. The balustrade posts are fitted with a cap rail, and an intermediate and lower rail, which carry decorative wooden splat balusters between them, are spaced nearly together with two sets of "V"s cut into their edges so that a diamond pattern is formed when they are placed together. Very few of these pickets are intact. Along the south gallery rail, is a wooden box with canvas cover that probably housed a spare range light. A Max Lumin 14-inch range light RL 355, serial number 0235, was stored inside the lantern room and probably was used in this box; it was removed in 2000.

The range light is a classic Fresnel lens in poor condition. The bull's-eye center has been replaced with a PYREX 7 marked "MADE IN (next area chipped out) 10" D. X 6 F.S.O." The brass frame of the lens is marked "HENRY - LEPAUTE a PARIS." The west half of the sixth and seventh annular ring is missing. The west side section of the lens is missing the second and seventh element. The east side had a door in which the prism elements were mounted, but it is missing along with all the elements. The lens pedestal is a hollow sheet iron cylinder into which is cut a door fitted with a brass handle; inside is a shelf. It was once painted green and later red.

Previously Existing Structures:

The keeper's dwelling was a 12-story, mansard roofed, square, wooden structure located at the base of the tower and built over the stone piers. It had four pediment windows on each side including the south side that also had a pediment door. On the mansard roof, were two pediment dormer windows on each side. The dwelling had horizontal wooden siding and was surrounded by a wooden gallery balustrade.

BA-1552

Conclusion

Craighill Lower Channel Rear Range is an early combination wooden tower with metal exoskeleton support. The tower contains a large percentage of original material. Most of the wood and all the metal framing material appears to date from its original construction and 1884, 1888, and 1897 alterations. The integral keeper's dwelling was destroyed, significantly affecting the integrity of this structure. The large percentage of original wooden fabric in the tower is unusual.

8. Statement of Significance

Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

X A	Property is associated with events that have made a significant contribution to the broad patterns of our history.
____ B	Property is associated with the lives of persons significant in our past.
X C	Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
____ D	Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

____ A	owned by a religious institution or used for religious purposes
____ B	removed from its original location
____ C	a birthplace or a grave
____ D	a cemetery
____ E	a reconstructed building, object, or structure
____ F	a commemorative property
____ G	less than 50 years of age or achieved significance within the past 50 years

Areas of Significance (Enter categories from instructions):

Maritime History
Transportation
Architecture

Period of Significance: 1873-1937[2]

Significant Dates: 1873, 1937

Significant Person (Complete if Criterion B is marked above): N/A

Cultural Affiliation: N/A

Known Design Source: none

Architect/Builder: unknown

Narrative Statement of Significance (Explain the significance of the property.)

The Craighill Channel Lower Range Rear Light Station is significant for its association with federal governmental efforts to provide an integrated system of navigational aids and to provide for safe maritime transportation in the Chesapeake Bay, a major transportation corridor for commercial traffic from the early nineteenth through twentieth centuries. Built using an exoskeletal tower design, the tower embodies a distinctive method of construction unusual for the upper Chesapeake Bay. This type of offshore exoskeletal lighthouse tower was usually built in coastal regions where soft sand or coral required this technology. The only other skeletal lighthouses in the region using this technique are on shore; these include Cape Charles Lighthouse, Virginia, and a few range lights along the Delaware River in Delaware and New Jersey.

The Craighill Channel Lower Range Rear Lighthouse is an early combination wooden tower with metal exoskeleton support. The tower contains a large percentage of original material. Most of the wood and all the metal framing material appears to date from its original construction and 1884, 1888, and 1897 alterations.

History

The Craighill Channel starts at the mouth of the Magothy River and extends to the southern end of Belvidere Shoal, a distance of approximately five miles. This channel forms the first leg of the maintained channel to the Patapsco River and Baltimore Harbor. The channel was named after William Price Craighill, a major in the Army Corps of Engineers and a member of the Lighthouse Board, who supervised the surveys for the widening and deepening of the channel.

[2] The period of significance is based on the period during which the light station was "manned;" i.e., from completion of construction until automation, 1873-1937.

The channel was dredged 169 feet wide and, generally, 21 feet deep, but the growing importance of Baltimore as a port persuaded Congress to appropriate $50,000 in 1870 to widen the channel to 500 feet and deepen it to 22 feet. Unlike the Brewerton Channel, which then intersected the Craighill Channel about a mile northeast of Seven Foot Knoll Lighthouse, Craighill had no lights to aid night navigation. The Lighthouse Board stated in 1871 that

> *this channel has the advantage of saving about five miles in distance to large vessels bound to Baltimore from the lower bay; avoids much, if not all, of the dangers usually experienced from the accumulation of ice in the lower part of the Brewerton Channel during the winter; is much easier navigated, or would be if range beacons were established.*[3]

Because of the location of the Craighill Channel and its connection with the Chesapeake Bay, shore range lighthouses would have required very powerful lights and an extremely high rear range light. Thus, the range lighthouses were built in the water. Both range lighthouses were originally designed to be screwpile foundation types, but the severe ice conditions during the winter of 1872-1873 convinced the Lighthouse Board to build a small caisson structure for the front range and a granite pier foundation for the rear range. Upon completion of this new pair of range lights, it was thought that "the two expensive lights built on jetties at North Point" would become "unnecessary" and "might be dispensed with." Congress appropriated $45,000, on June 10, 1872, "for two range lights for Craighill Channel into Patapsco River from Chesapeake Bay, to take the place of the two lighthouses now at North Point."

Because of bottom conditions at the chosen site for the rear range lighthouse, "a pile and grillage foundation became necessary to support the piers on which the columns of the frame-work rest." A cofferdam of sheet piling, 60 by 60 feet, around the entire site for the nine piers was constructed in April 1873 in two feet of water. The dam was damaged twice by "heavy gales." Piles were driven and cut off evenly, then a grillage of timbers placed on top, and finally the nine piers of Port Deposit granite were constructed on top. The cofferdam was then dismantled. The lighthouse was an open framework in the "form of a frustum of a pyramid of four sides, the corner columns being of cast iron resting on cast iron disks, which are anchored to the masonry of the piers." The keeper's house was built within the frame at the base of the pyramid "through which an enclosed stairway will pass, leading to the lantern." The cost of the rear range foundation was more than anticipated because of difficulty in securing a stable foundation in the soft bottom. The appropriated funds were, therefore, not sufficient to cover the total cost of completing both range lighthouses. Thus, a temporary light was established on the unfinished structure on November 20, 1873. Temporary accommodations for the keepers were prepared on shore by making use of the quarters used by the construction crew. A request for additional funding was made in 1874, and $45,000 was approved on June 23, 1874. Work resumed and was completed in March 1875.[4]

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[3] Lighthouse Board, *Annual Report, 1870*; and *1871*, pp. 30-31; de Gast, p. 105; and Holland, *Maryland Lighthouses of the Chesapeake Bay: An Illustrated History*, in press, Chapter 4, page 2.

[4] Lighthouse Board, *Annual Report, 1870*; *1871*; *1873*; *1874*; and *1875*.

The structure received "extensive repairs" in June 1884 when all the wooden braces, most of which were "much decayed," were removed and replaced by iron swivel and Phoenix beam braces; iron straps were placed on all the tower beams resting on iron; the upper and lower decking was repaired; a new rack for lantern panes was made; new boat davits were erected; gutters and down spouts were replaced; the roof was repaired; and the entire exterior was painted.[5]

On August 21, 1888, a "cyclone" carried away the roof of the dwelling, the copper smokestack, and portions of the galvanized iron sheets covering the tower. Damage was also done to the doors, windows, and gallery. All repairs were completed in the same year.

Also in 1888, the owner of the land near the lighthouse on Miller's Island brought a suit against the United States for damages for what he called "unauthorized occupation of the site" under the laws of riparian rights. The courts ruled against him.[6]

In 1897, the timbers at the base of the tower, where they rested on the stone piers, had decayed and were replaced and strengthened by iron rods and beams. The "old storage platform" was replaced and a new ladder provided. The structure was also painted. In 1899, new model fourth-order lamps were installed and minor repairs made.[7]

A Coast Guard engineering survey conducted on the lighthouse in April 20, 1994, stated the wooden tower "will rapidly become a serious safety hazard to servicing personnel" and the Coast Guard "shouldn't spend any more money trying to maintain it." The Fifth District "should initiate a project to demolish the tower (not framework) and replace it with a light lowering device." The engineer correctly states of the structure, "Although it is eligible [for listing on the National Register], the tower is not listed as a historic structure." However, the engineer did not understand that being determined eligible means the structure must be treated the same as one, which is listed.[8]

In 2000, the USCG made repairs to the structure including installing single pane Plexiglas with vents in the window openings and replacing the banister in the watch room.

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[5] Lighthouse Board, *Annual Report, 1884.*

[6] Lighthouse Board, *Annual Report, 1889.*

[7] Lighthouse Board, *Annual Report, 1887*; and *1899.*

[8] "Biennial Lighthouse Inspection Report, Fifth District, Craighill Channel Range Rear Light, LLNR 8050," inspection performed by LCDR Boy and LT Walz of CEU Cleveland, April 20, 1994. Copy of report in Craighill Channel Light file, National Maritime Initiative office, National Park Service, Washington, D.C.

AA-1550

9. Major Bibliographical References

"Biennial Lighthouse Inspection Report, Fifth District, Craighill Channel Range Rear Light, LLNR 8050," inspection performed by LCDR Boy and LT Walz of CEU Cleveland, April 20, 1994. Copy of report in Craighill Channel Light file, National Maritime Initiative office, National Park Service, Washington, D.C.

Clifford, Candace. *1994 Inventory of Historic Light Stations*. Department of Interior, National Park Service, History Division, Washington, D.C., 1994.

de Gast, Robert. *The Lighthouses of the Chesapeake*. The Johns Hopkins University Press, Baltimore and London, 1973.

Holland, F. Ross, Jr. *Maryland Lighthouses of the Chesapeake Bay: An Illustrated History*. Maryland Historical Trust, Crownsville, Maryland, in press.

U.S. Lighthouse Board. *Annual Reports*, 1870-1899. Department of Commerce and Labor, 1870-1899.

Previous documentation on file (NPS)
___ preliminary determination of individual listing (36 CFR 67) has been requested.
___ previously listed in the National Register
X previously determined eligible by the National Register
___ designated a National Historic Landmark
___ recorded by Historic American Buildings Survey # _____
___ recorded by Historic American Engineering Record #

Primary Location of Additional Data
X State Historic Preservation Office
___ Other State agency
X Federal agency
___ Local government
___ University
___ Other
Name of repository: National Archives; Library of Congress; National Maritime Initiative, National Park Service; U.S. Coast Guard Headquarter, Historian's Office, Washington, D.C.

10. Geographical Data

Acreage: Less than one acre

USGS quadrangle: Sparrows Point, MD

UTM References:	Zone	Easting	Northing
	18	379635	4342895

Boundary Description:

The boundary is conterminous with the foundation of the light station.

Boundary Justification:

The boundary completely encompasses the light station.

11. Form Prepared By

name/title: Ralph E. Eshelman, Maritime Historian
(Originally prepared for the Maryland Historical Trust as part of a multiple property nomination for Maryland Lighthouses; reformatted in May 1998 by Candace Clifford, NCSHPO consultant to the National Maritime Initiative, as part of a multiple property documentation form for U.S. Coast Guard-owned light stations; edited and revised in August 2002 by Jennifer Perunko, NCSHPO Consultant, National Maritime Initiative, National Park Service)

organization: Eshelman & Associates

date: January 27, 1996

street & number: 12178 Preston Dr.

city or town: Lusby state: MD zip code: 20657

telephone: 410-326-4877

BA-1552

Property Owner

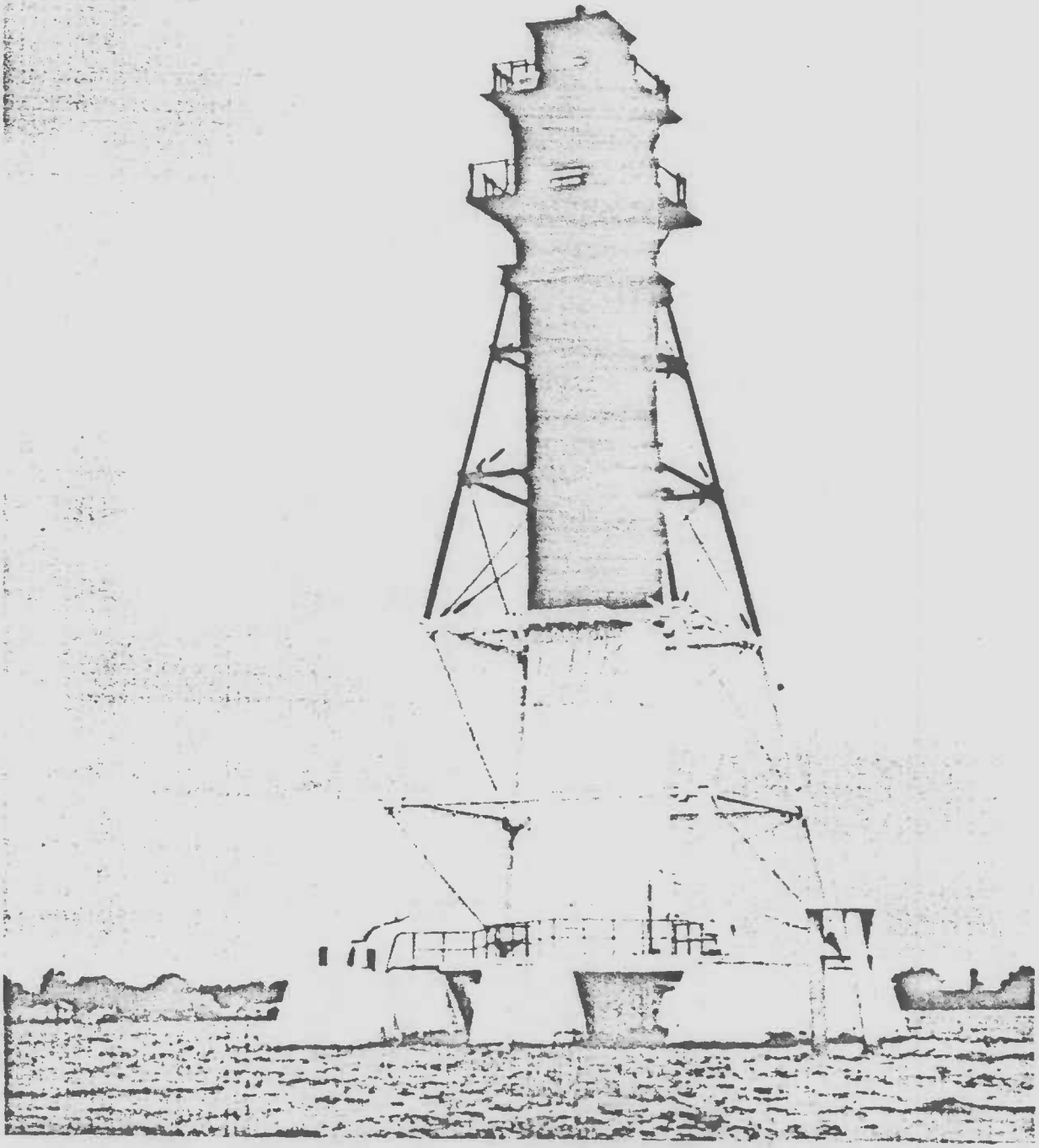
name: U.S. Coast Guard, Fifth Coast Guard District

street & number: 431 Crawford Street

telephone: (757) 398-6351

city or town: Portsmouth state: VA zip code: 23705

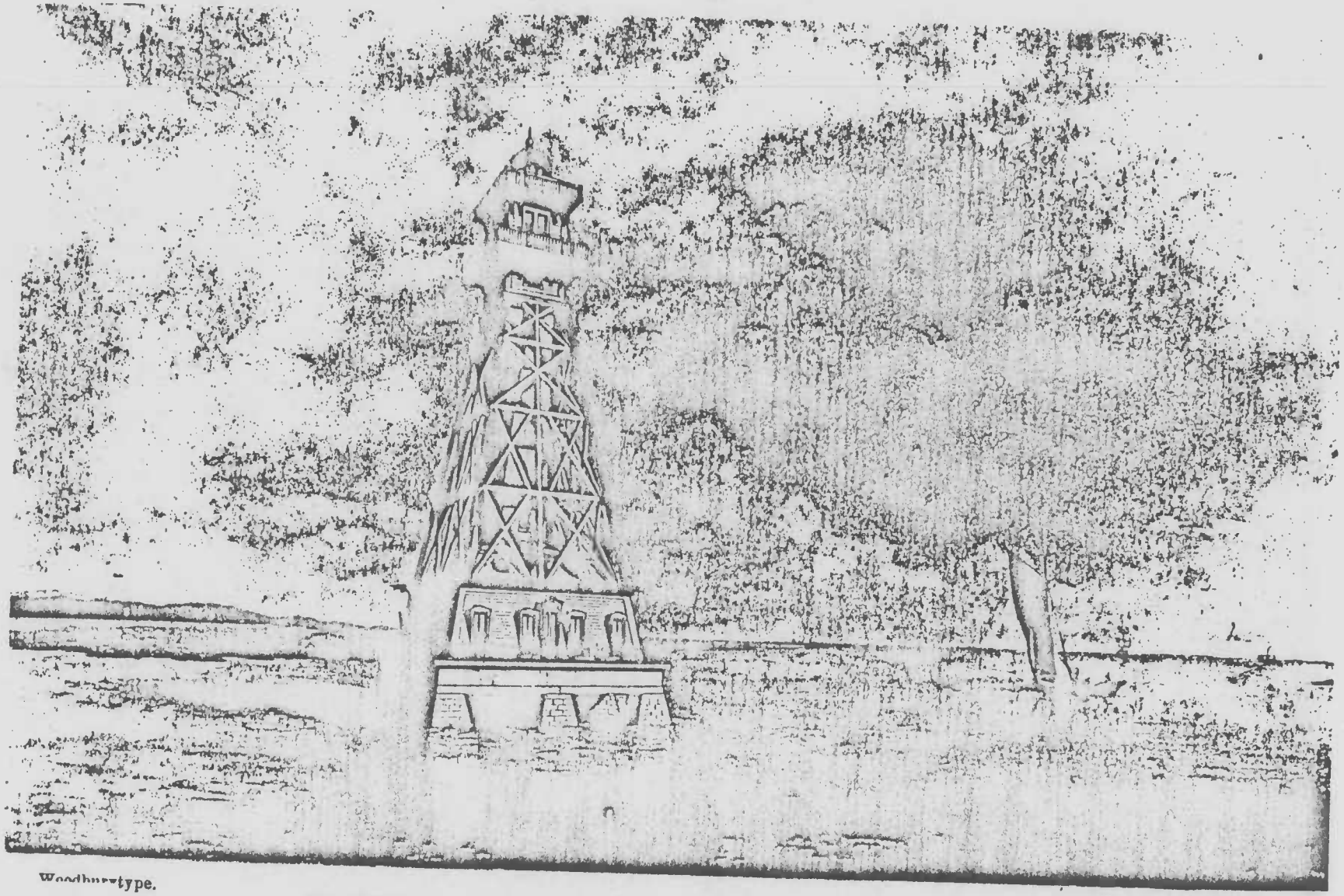
BA-1550



RA-1552

U. S. LIGHT-HOUSE ESTABLISHMENT.

1873.



Woodburytype.

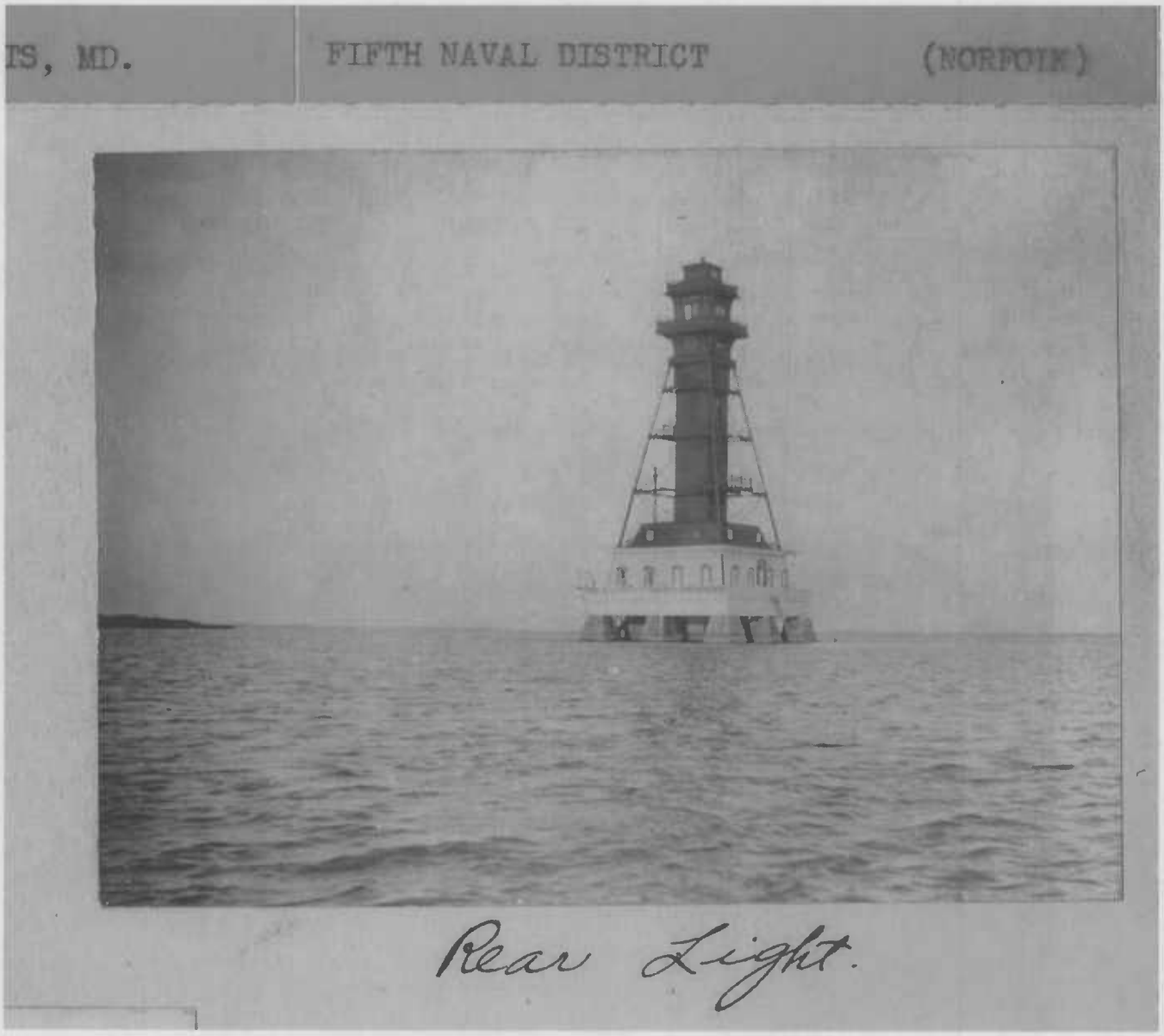
Am. Photo-Relief Printing Co., Philada.

CRAIGHILL'S CHANNEL RANGE OR LEADING LIGHTS.

CHESAPEAKE BAY.—THE HIGH LIGHT.

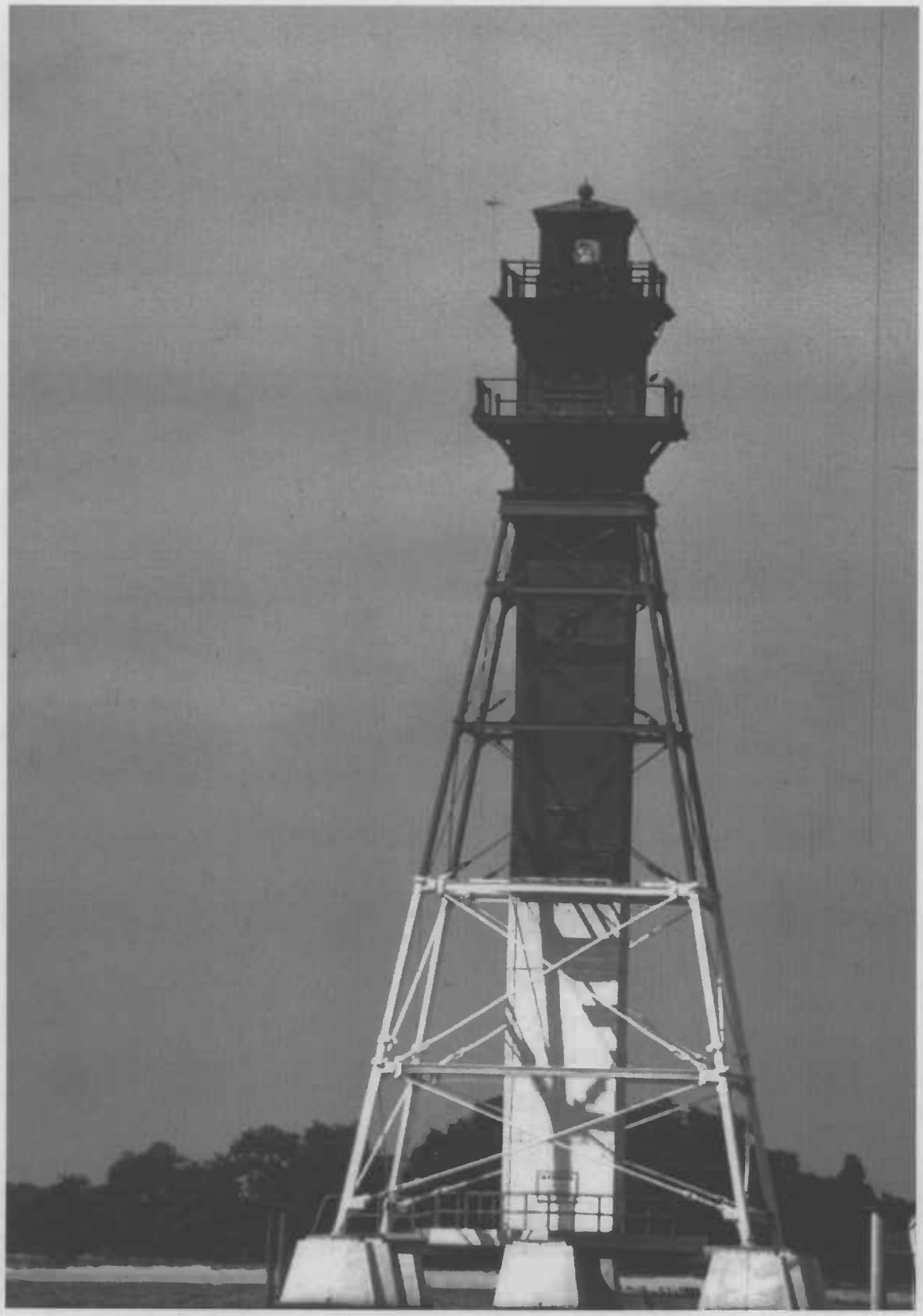
REPRODUCED AT THE NATIONAL ARCHIVES

BA-1550
Craighill Channel Lower Range Rear Light
photographer unknown
c. 1912

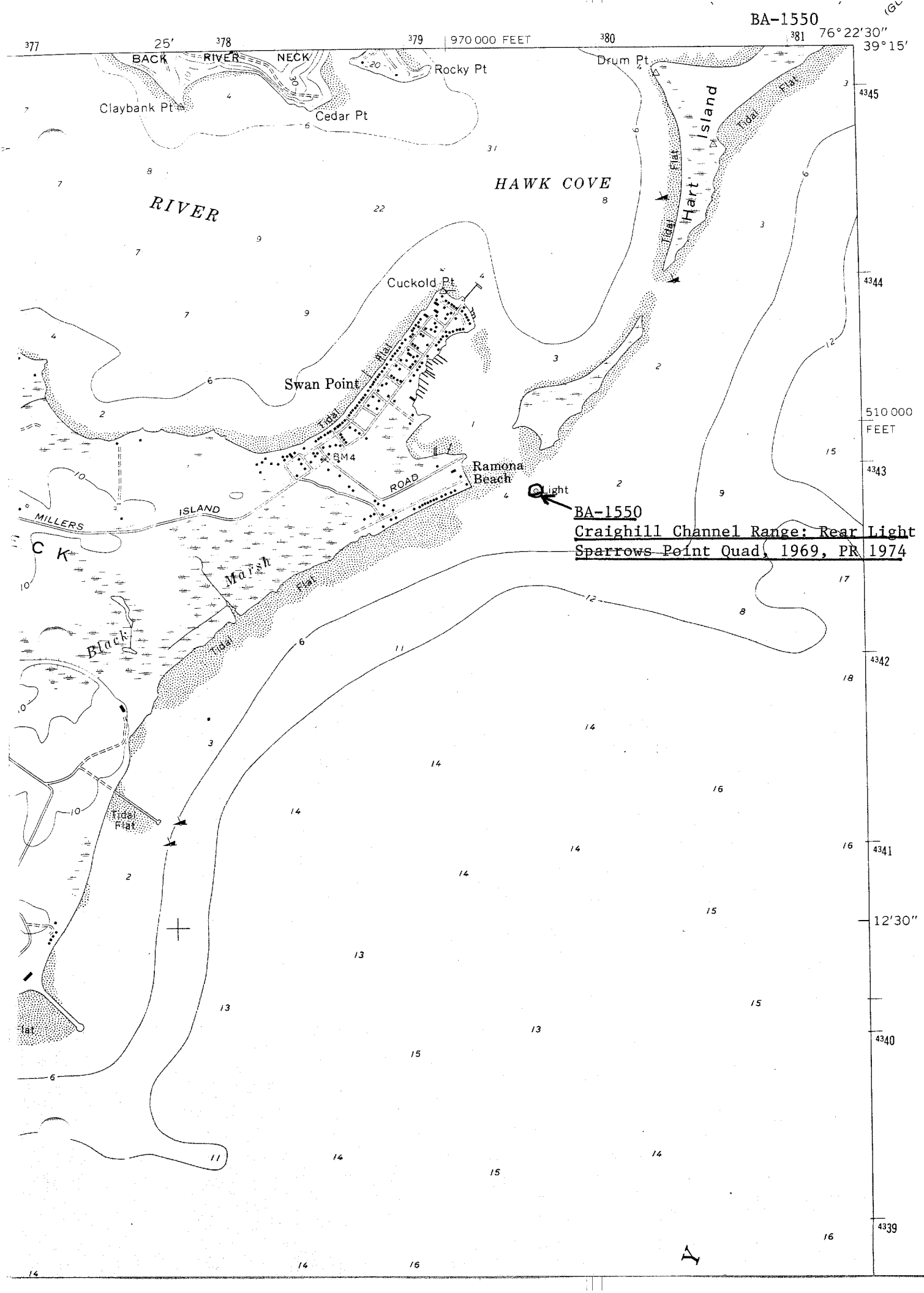


BA-1550
Craighill Channel Lower Range Rear Light
photographer unknown
14 March 1960

BA-1550
Craighill Channel Lower Range Rear Light
Photo by: Skip Willits, 1991

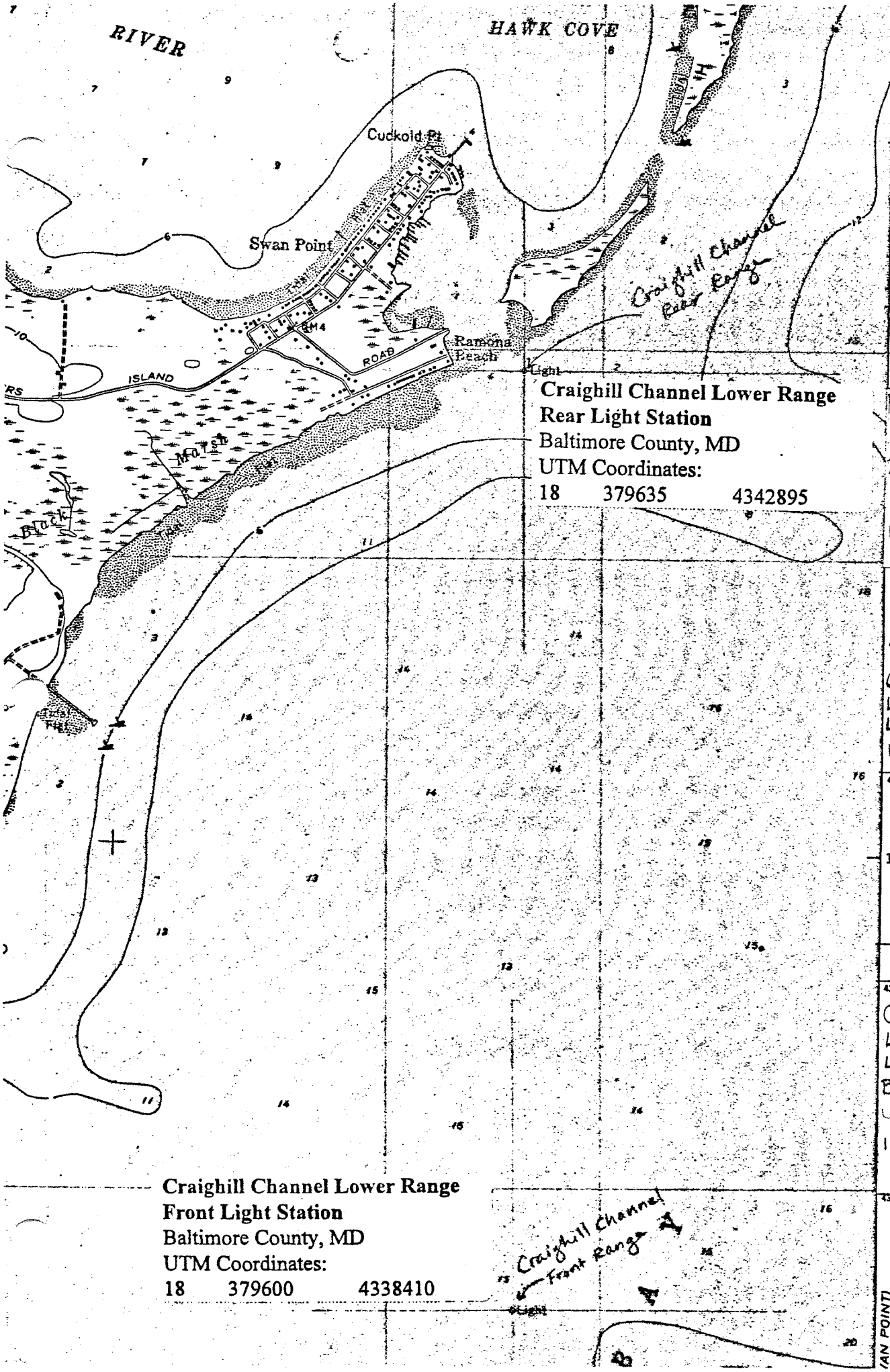


BA-1550



BA-1550
Craighill Channel Range: Rear Light
Sparrows Point Quad, 1969, PR 1974

BA-1550



Craighill Channel Lower Range Rear Light Station
Baltimore Co., MD
UTM Coordinates:
18 379635 4342

Original map located in Craighill Channel Lower Range Front Light Station nomination.

Craighill Channel Lower Range Front Light Station
Baltimore Co., MD
UTM Coordinates:
18 379600 43384